

Amendment and Response

Applicant: Johannis Cornelis Slabbekoorn et al.

Serial No.: 10/587,883

Filed: July 27, 2006

Attorney Docket No.: CGL04/0034US01

Title: PROTEIN CONCENTRATE AND AN AQUEOUS STREAM CONTAINING WATER-SOLUBLE CARBOHYDRATES

SPECIFICATION:

In the Specification, please replace sections [0050], [0060], and [0071] with the following replacement sections (shown here with markings to show all changes relative to the previous version of the section):

[0050] Starch content was determined by a method derived from AACC 76-13 and the Megazyme kit method for starch. Samples were washed with ethanol to remove sugars. Solubilization of starch is achieved by cooking the sample in the presence of thermostable α -amylase followed by amyloglucosidase. The glucose formed is measured using glucose oxidase/peroxidase reagent and measurement of the absorbance.

[0060] For clarity, the following description of the process is provided as it was used for a sample having a ratio of 1:6 (CG cake:LSW). A mixture of 1800 mL of freshly taken light corn steep water (dry solids content 10.5-10.8%) and 300 g of dewatered corn gluten cake (35-40% of dry solids--see Table 1-1 for appropriate number) was stirred for 30 minutes at 50.degree. C. At the end of this period the pH was adjusted with 10% (m/m) sodium hydroxide to pH 5.8-6.2. Liquefaction of the starch was achieved by adding 0.1% of thermostable α -amylase (e.g. Termamyl.TM., Novozymes A/S, DK-2880 Bagsvaerd, Denmark) on dry matter basis to the slurry and heating at 95.degree. C. for 15 minutes. The slurry was cooled to 60.degree. C. and adjusting the pH to 4.7 with 10% (m/m) hydrochloric acid, 0.1% of gluco-amylase (e.g. Glucostar 300 L, Dyadic International Inc., Jupiter, Fla., USA) on dry base added and incubation was continued for at least two hours.

Amendment and Response

Applicant: Johannis Cornelis Slabbeboom et al.

Serial No.: 10/587,883

Filed: July 27, 2006

Attorney Docket No.: CGL04/0034US01

Title: PROTEIN CONCENTRATE AND AN AQUEOUS STREAM CONTAINING WATER-SOLUBLE CARBOHYDRATES

[0071] Heavy gluten slurry was adjusted to pH between 5.8 to 6.2 and 0.1% of thermostable α -amylase (e.g. Termamyl 120 L from Novozymes A/S, DK-2880 Bagsvaerd, Denmark)) was added on dry matter base at ambient temperature. This mixture was pumped at a flow rate of 80 L/h through the liquefaction unit with a steam injector operating at steam pressure of 7.5 bar. Product pressure was 10 bar at 100.degree. C. and mixture had a holding time of 15 minutes (back pressure of 1 bar).